



San Diego County Public Health Laboratory

Health and Human Services Agency
3851 Rosecrans Street, Suite 716
San Diego, CA 92110
619-692-8500
CLIA #05D0060808

Zika Virus (ZIKV) Diagnostic Specimen Testing Guidance

Who should be tested:

Zika testing can be performed at the San Diego County Public Health Laboratory (SDPHL) and other commercial laboratories. Dengue and Chikungunya testing is available at commercial laboratories. Patients that are symptomatic who lives in or recently traveled to an area with risk of Zika should be tested, he or she may have been infected with other mosquito-borne viruses like dengue or chikungunya that often circulate in the same geographic regions and present with similar clinical illness. Asymptomatic pregnant women who have traveled to areas with Centers for Disease Control and Prevention (CDC) Zika travel notices should also be tested. See CDC website for more information at <https://www.cdc.gov/zika/hc-providers/types-of-tests.html>. Algorithm for testing can be found on the SDPHL website at http://www.sandiegocounty.gov/hhsa/programs/phs/phs_laboratory/index.html.

Required Form(s) and Supplemental Information:

- San Diego County Public Health Laboratory Test Request Form, go to the website at http://www.sandiegocounty.gov/hhsa/programs/phs/phs_laboratory/index.html
 - **NOTE: To process specimens the following information must be completed on the form**
 - First and Last Name
 - DOB
 - Gender
 - Ordering Physician
 - Facility
 - Phone number
 - Fax number
 - Alternate contact and phone number
 - Date collected
 - Specimen source
 - Requested test
- California Department of Public Health (CDPH) Viral and Rickettsial Disease Laboratory (VRDL) General Submittal Form 300 needed if specimen needs additional testing:
https://www.cdph.ca.gov/programs/vrdl/Documents/VRDL_General_Human_Specimen_Submittal_Form_Lab300.pdf
- CDC DASH Form2016 (CDC Form 50.34) for saliva, semen, or tissue samples. **Pre-approval required.**
Please call the Epidemiology Program at 619-692-8449

Tests Offered and Specimens Collection Requirements:

Test Name	Description	Test Method	Acceptable Specimens	Collection
Zika Panel	For <u>acute and convalescent</u> screening of Zika infection	Detection of Zika nucleic acid and IgM antibodies	Urine Urine specimen must be accompanied with a serum specimen	Collect 2-5 mL within 14 days after onset of symptoms or exposure
			Serum	Collect 2 SSTs within 7 days-12 weeks after onset of symptoms or exposure
Zika NAAT	For <u>acute</u> detection of Zika infection	Detection of Zika nucleic acid	Urine Urine specimen must be accompanied with a serum specimen	Collect 2-5 mL within 14 days of onset of symptoms or exposure
			Serum	Collect 2 SSTs within 14 days of onset of symptoms or exposure
Zika IgM	For <u>convalescent</u> screening of Zika infection	Detection of Zika IgM antibodies	Serum	Collect 2 SSTs within 7 days-12 weeks after onset of symptoms or exposure
Trioplex PCR <u>This test is available upon consultation. Please contact the lab.</u>	For <u>acute</u> detection of Zika, Dengue, and Chikungunya infection	Detection of Zika, Dengue, and Chikungunya nucleic acid	Urine (for Zika detection only) Urine specimen must be accompanied with a serum specimen	Collect 2-5 mL within 14 days of onset of symptoms or exposure
			Serum	Collect 2 SSTs within 14 days of onset of symptoms or exposure
			CSF	Collect 1-2 mL within 14 days of onset of symptoms or exposure
			Amniotic Fluid (for Zika detection only)	Collect 2-5 mL within 14 days of onset of symptoms or exposure

Storage and Transport Instructions:

Store samples at 4-8 °C and ship on cold packs to San Diego County Public Health Lab within 24 to 72 hours.

Turnaround Time (TAT):

- SDPHL: 1-7 days
- CDPH VRDL: 2-4 weeks
- CDC: 4-6 weeks

Interferences and Limitations:

ZIKV IgM antibodies may be detected after 3 days post-onset of symptoms but may not develop during the first 7 days of illness. A convalescent specimen may be required. ZIKV IgM may persist for months and may cross react with other arboviruses leading to false positive IgM capture ELISA serology results. Additional confirmatory testing by PRNT is required. Immunization against Yellow Fever or Japanese Encephalitis as well as past infection with other arboviruses such as West Nile or St. Louis encephalitis virus may complicate interpretation of serology results. If specimens are tested outside the recommended range, the results may have little clinical value.

Reference Range:

Not Detected

Interpretation of Test Results:

Access the Emergency Use Authorization Fact Sheets for interpretation of test results from the SDPHL website at http://www.sandiegocounty.gov/hhsa/programs/phs/phs_laboratory/index.html.